

Appl. No. 10/500,484

~~Amdt. Dated November 9, 2006~~

Response to Office Action of August 9, 2006

Amendments to the Specification

A. Amendments to Include Section Headings

Please add the section headings in the following positions shown by placing the heading between the two paragraphs in the specification in which each heading should be located.

1. Title of Invention and Background of Invention

Insert the subject heading "Title of Invention," the title of the invention "WIND DRIVEN SAILING CRAFT," and the subject heading "Background of Invention" before the first paragraph as shown below.

Title of Invention

WIND DRIVEN SAILING CRAFT

Background of Invention

This application is the U.S. National Phase of PCT Application Number PCT/GB03/00373, filed on 29 January 2003, which claims priority to Great Britain Application Number 0202142.6, filed 30 January 2002.

2. Field of Invention

Insert the subject heading "Field of Invention" between the following paragraphs, as shown.

This invention relates to a watercraft which may be used for sailing using wind power but which can maintain a level trim when mechanically propelled at higher speeds.

Field of Invention

Sailing craft can be provided with a displacement mono-hull with a transverse cross-section which tapers downwardly on each side to its keel line, and which increases in cross-

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section from the bow to a fullest transverse section, and decreases in cross-section from the fullest transverse section to the after end. Such a mono-hull shape is suitable for sailing because of its streamlined longitudinal shape when upright and when heeled over.

3. Description of the Related Art

Insert the subject heading "Description of the Related Art" between the following paragraphs, as shown.

However, displacement mono-hulled sailing craft as described above are not suitable to be mechanically propelled at high speeds. When mechanical propulsion means, for example, an outboard motor or a screw, provide high levels of forward thrust to the after end of the hull, the bow is forced out of the water and the aft sinks lower into the water. This action slows the craft because its forward facing profile is increased, resulting in greater resistance against the water. The more power which is provided to the after end of the hull, the greater the bow lift and the water resistance. As a result, the maximum speed which can be reached is fixed, regardless of the size of the engine. The object of the present invention is to overcome some of these problems and provide a watercraft with a displacement hull which may be used for sailing and be mechanically propelled at high speeds.

Description of the Related Art

A previous attempt to provide a watercraft which may be used for sailing and be mechanically propelled at high speeds is shown in GB2150890 in the name of LANCER YACHT CORPORATION.

4. Brief Summary of the Invention

Insert the subject heading "Brief Summary of the Invention" between the following paragraphs, as shown.

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The present invention is intended to provide a novel approach.

Brief Summary of the Invention

Therefore, according to the present invention a wind driven sailing craft with a hull of the displacement type with a keel or keels, is provided with hydrofoil means adapted to lift the stern of the craft when the craft is propelled forward in use by power propulsion means acting at the stern of the hull.

5. **Brief Description of the Drawings**

Insert the subject heading “Brief Description of the Drawings” between the following paragraphs, as shown.

The invention also includes a hydrofoil element for use with a wind driven sailing craft with a hull of the displacement type with a keel or keels, which is provided with the hydrofoil means adapted to lift the stern of the craft when the craft is propelled forwards in use by power propulsion means acting at the stern of the hull.

Brief Description of the Drawings

The invention can be performed in various ways but one embodiment will now be described by way of example and with reference to the accompanying drawings in which:

6. **Detailed Description of the Invention**

Insert the subject heading “Detailed Description of the Invention” between the following paragraphs, as shown.

Figure 6b is a diagrammatic side view of the hull shown in Figure 6a with the cross sectional lines.

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Detailed Description of the Invention

Figures 1 shows a displacement boat hull 1 which is shaped for sailing and is approximately 13 metres in length. Figures 3a and 2b show the cross-sectional contours of the hull 1. The hull 1 has a broad beam to provide sufficient righting moment to support the sails and provide an adequate lever arm for internal water ballast. In other respects the hull 1 is shaped for high-speed sailing (approximately 10 knots). As shown in Figure 1, the hull 1 is provided with a drop keel 2 with a ballast bulb 3 and a hydrofoil element 4. The hydrofoil element 4 comprises two struts 5 and an interconnecting horizontal wing 6. The wing 6 is substantially rectangular in shape with the shorter sides thereof disposed substantially parallel to the direction of the hull 1. The hydrofoil element is mounted adjacent to the aft 7 of the hull 1.

7. Abstract

Insert the subject heading "Abstract" after the last claim, on a separate sheet of paper, as shown.

Abstract of the Invention

A wind driven sailing craft is disclosed with a hydrofoil element which provides variable lift to the stern of the craft to maintain a level trim when the craft is operated under power propulsion. The hydrofoil element includes a hydrofoil wing which rotates on a transverse axis to provide the desired lift.

B. Amendment of Antecedent Basis

(Replacement Paragraph) Preferably, the hydrofoil element is attached to the bottom of the hull by two struts. The hydrofoil element can be substantially rectangular in shape, with

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the shorter sides thereof disposed substantially parallel to the direction of the hull. Further, the hydrofoil element can have a streamlined cross-section with an elongated tear-drop shape, which passes through the water with the least drag. The hydrofoil element can be adapted to rotate on a transverse axis to provide variable lift to the stern of the sailing craft.